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AUTHOR Brown, Edward K.
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ABSTRACT

The sequence that the decisions of school management follow is discussed. This sequence follows four major steps: procedural, continuance, dissemination, and reallocation. Each of these steps is directly related to: (1) planned instructional activities, (2) on-going program and administrative practices, and (3) overlapping conditions between newly implemented and existing programs. To assist school management in developing, implementing, and sustaining instructional programs that have merit, research and evaluation units are responsible for providing data that are essential to making decisions regarding instructional programs. It is suggested that the best method for ascertaining what (and when) the decision mechanism and control system of a school system are would be to document those operational steps that encompass the development and implementation of an instructional program. (DB)

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CHANGES IN SCHOOL MANAGEMENT'S NEEDS FOR EVALUATION INFORMATION

Edward K. Brown

Office of Research and Evaluation

The School District of Philadelphia

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One major function of school management is to provide leadership in the development and implementation of successful instructional programs. To meet this responsibility, school management must deploy and direct its material and personnel resources to meet the instructional needs of its school population. Although the decisions they make consist of complex policies and procedures, these decisions might appear to the uninitiated to be a singular action commonly called "the decision-making process."

Because school management decisions are sometimes considered to be singular actions, recommendations for improving the impact of such decisions have centered around the use of rater formalized methods (i.e., systems analysis, PERT, PPB). Although such techniques have been suggested and used, they have been neither fully accepted nor implemented to the extent that they have identified, defined, or demonstrated significant relationships between resource inputs and instructional outputs (Chirikos and Wheeler, 1968).

School Management Decisions

The fact that standardized control systems have not been used effectively in education should not suggest that educational systems

do not have well-defined control mechanisms. Educational systems tend to apply a management control technique. Management control techniques differ from strategic planning and operations control in that they focus on the whole organization rather than specific sub-units of the organization. Anthony (1965) defined management control as a process by which management assures that resources are obtained and used effectively in the accomplishment of the organization's objectives. School management decisions fall into four general categories: procedural modification, program continuance, program dissemination, and program reallocation. Accordingly, the range of information it needs varies from the qualitative documentation of instructional practices to the resource analysis of specific program subcomponents. The question as to when and which level of information school management needs depends on the length of time a program has been in operation and the degree to which that project overlaps other programs within the school system. However, at any given decision point, the total information need is reflected as the summation of each program's history. For example, if a decision is to be made about three programs having different implementation dates, school management needs three different levels of information.

To provide a better understanding of the nature of the decisions school management must make, operational definitions of the four general decision categories are given below. In each case, reference is made to the length of time the program under consideration has been operating.

Procedural Modification (Years 1 & 2)

At the start of a program, it is essential to know whether it is being implemented properly. During these years, school management is required to make decisions that will lead to the orderly adoption of the project's instructional plans and policies. A number of internal audits are needed to determine (a) whether the planned material and program resources are arriving on schedule, (b) whether the target population is being served, (c) whether the implementation procedures are being delayed due to some systematic problem, (d) whether staff development activities are underway and well received, and (e) whether pertinent data for the respective funding agencies/sources are being collected. Such decisions have a priority during this period because unless the enunciated instructional processes and procedures are firmly comprehended and executed, the true value of the project will not be realized.

Program Continuance (Years 3 & 4)

During this period, school management, having made procedural modifications to successfully implement the project, must decide (a) whether the newly implemented project is capable of delivering its specified services and (b) whether these services are producing meaningful changes in the educational patterns of the target children. Associated with this concern is the need to know how much it costs to deliver the services and whether it is worthwhile to continue the investment of material and personnel resources. The major decision, therefore, is to determine whether the project is productive

and whether it is worthwhile to continue to offer its services.

Program Dissemination (Years 5 & 6)

At this time, the project will have become an integral part of the school system's instructional offerings. Since most of its operational constraints will have been worked out, its current instructional configuration (i.e., class size, teaching strategy) would probably be in that form which permits an optimal level of delivery. For these reasons, school management has to make a number of strategic plans. Of the many considerations, the highest priority is on project dissemination.

Program Reallocation (Years 6 & 7)

Reallocation and dissemination decisions are closely related. When a project is considered for dissemination, school management has to examine the proposed project in a number of ways. In this process, they have to assess each of the project's components to determine whether it is necessary to disseminate all or some of the project. Because this activity preceeds a "turn-key" action, care is taken to formulate cost-effective units. Therefore, school management has the crucial responsibility of constructing viable instructional additions for the school system.

Research and Evaluation Activities

To obtain systematic information about the status of instructional programs within its school system, school management turns to its research and evaluation unit. School management expects that the information developed by its unit will be both timely and

reflective of the conditions within the school system. If it is not, school management, although convinced that the evaluation information is itself valid, will not use the information as a major reference source. Grobman (1970) described this situation in her discussion of curriculum evaluation. She stated that evaluation information had no value unless its recipients believe that the evaluation information is useful. Therefore, it seems that if evaluation information is to be useful, it must be in-phase with the perceived information needs of school management.

In Figure 1, the four levels of school management decisions are given with the appropriate research and evaluation design technique. Although a concise statement of the preferred analysis procedure is given, a more detailed discussion of each evaluation phase is given below.

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Insert Figure 1 about here
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Phase I: Specific Information (Years 1 & 2)

During implementation years 1 & 2, process evaluation techniques should be emphasized (Brown, 1970). In operational terms, process evaluation techniques describe the implementation process--that is, they put a heavy emphasis upon the monitoring of (a) classroom activities, (b) staff development activities, (c) classroom management practices, and (d) the development of demographic information (i.e., enrollment patterns of the participating schools). In essence, process evaluation techniques describe and document all

aspects of the implementation process (Baker, 1969).

Outcomes of this process evaluation produce specific information about the discrepancies between theoretical concepts and practical methodologies, as well as the major distinctions between proposed and emergent program characteristics (Provus, (1969). These data would cover all bases of the project--even those areas which might appear to be unresearchable (i.e., the preparation of a project X school X grade matrix). Such data assist school management (1) to identify areas of program strength and weakness, (2) to make adjustments in the internal and external management of the project, and (3) to modify policies governing the relationship of the project to other instructional programs.

Phase II: Comprehensive Information (Years 3 & 4)

By this phase, many of the project's initial problems will have been resolved and the project will be delivering its services in a consistent manner. However, school management wants to know whether the inputs of the project are producing the desired results. To obtain this kind of information, R & E personnel should use formative evaluation techniques. This is the method of choice because it provides data that test whether a project is reaching its objectives and is producing desired behavioral changes in the target children. If the desired criteria have not been reached by the project, the method gives an estimate of how far the project is from reaching its terminal goals. These relative success measures provide school management with reliable data and assist them in ascertaining

what kinds of changes are needed to improve the outputs of the project.

Phase III: Judgmental Information (Years 5 & 6)

Projects having been sustained for this length of time are those which have demonstrated successfully their ability to deliver their services or products. Now, school management, being required to determine which of the prescribed services are to be disseminated, requires a different level of information. These decisions become more crucial when there are more than one project directed toward the same instructional objective. A similar situation exists when the projects represent major alternatives to existing school programs.

To assist school management, R & E personnel should use longitudinal or trend analysis techniques. These techniques permit the use of the many data sources which have been developed, codified, and stored over the past five years to be retrieved, catalogued, and displayed. These data may be formatted in a time series design containing integrals of the variables (i.e., exposure indices, multiple correlation coefficients). School management will expect the investigator to study the results of these analyses and prepare statements of his findings and recommendations. At this time summative techniques are also useful. Comparisons between participants and nonparticipants may be performed. However, since the summative data can only indicate whether the participants are performing better than the nonparticipants at this point in time, the former procedure is preferable because it provides a more comprehensive review of the historic impact, actions, and outputs of the project.

Phase IV: Component Impact Information (Years 6 & 7)

When school management is faced with deciding which of many projects having the same thrust is the best, a different assessment procedure must be employed. For it is not enough to know or identify the best parts (components) of each project, it is essential to know which combination of components would best meet the specific needs of the school district's children. When a school system has more than one need group, component impact procedures would provide school management with a number of cost-effective combinations.

A suitable component impact analysis procedure (CIAP) was used by Brown (1972) to describe the impact of Title I projects in Philadelphia. The proposed CIAP permitted the analysis of the impact of 16 projects in 69 elementary schools. It gave a composite picture of the additive or compounding effects of these projects. By incorporating cost, demographic, achievement, and project content input data into a hierarchial matrix (project density), Brown was able to derive the impact characteristics of the resource allocations. By analyzing the thrusts (additive inputs) of the emergent resource patterns (intervention experiences), the most appropriate component combinations were identified. Therefore, through CIAP, school management was provided not only with information about how the resources had been allocated to meet specific needs, but which combinations of resources was most productive. These data provided school management with a number of alternative ways in which their resources could be reallocated into more productive effective units.

Discussion

The general belief that more sophisticated research and evaluation designs will satisfy the informational needs of school management is misleading. Although the discussions about the relevancy of current research designs are important, they circumvent the more real and pressing problem--namely, how to get school management personnel to use evaluation as a primary source in their decision-making process. It would seem that as long as the functions of school management are conceived within the narrow context of a "decision-making process," little progress can be made.

The major purpose of this paper has been to demonstrate that the decisions of school management follow a well-defined sequence. Decisions begin as qualitative, pragmatic concerns for the orderly implementation of a program through a period when they become desires for the quantitative differentiation between common components found in parallel programs.

In general, the sequence of school management decisions follow four major steps: procedural, continuance, dissemination, reallocation. Each of these steps is directly related (1) to planned instructional activities, (2) to on-going program and administrative practices, and (3) to overlapping conditions between newly implemented and existing programs. Because the education of children is an organic activity which changes as a function of the needs of the children served, a school system always has a diversity

of program levels. It is this diversity that causes school management's decisions to be multifaceted. Compounding these conditions are the influences from outside the school system. Political pressure, social change, pupil mobility patterns, and community interests are but a few of such influences or factors. But, given these factors, school management must maintain its responsibility for developing, implementing, and sustaining those instructional programs of merit.

To assist them in this effort, school management personnel turn to research and evaluation (R & E) units. R & E units, therefore, have the responsibility for providing those data that are essential for making the most appropriate decisions about instructional programs. However, if R & E units feel that they should wait for school management to develop or enunciate significant research questions, or to define specifically what they need at a given moment in time, R & E units will continue to provide information that is out-of-phase with the major concerns of the school system. R & E units should begin to study the decision-making mechanism and management control system of their respective school systems to find out how they might best be of service. For when the decision mechanism and control system are known, it is relatively to develop and present appropriate evaluation information.

The findings of this study suggests that the best method for ascertaining what (and when) the decision mechanism and control system of a school system would be to document those operational

steps which encompass the development and implementation of an instructional program. As is shown in Figure 2, a direct relationship exists between the developmental and implementation phases (years in operation) of an instructional program and requisite

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Insert Figure 2 about here
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school management information (research and evaluation techniques). When this relationship is established for a school system, R & E units become able to respond to the changing information needs of school management. Furthermore, such an alignment would substantially increase the impact of evaluation information on instructional change.

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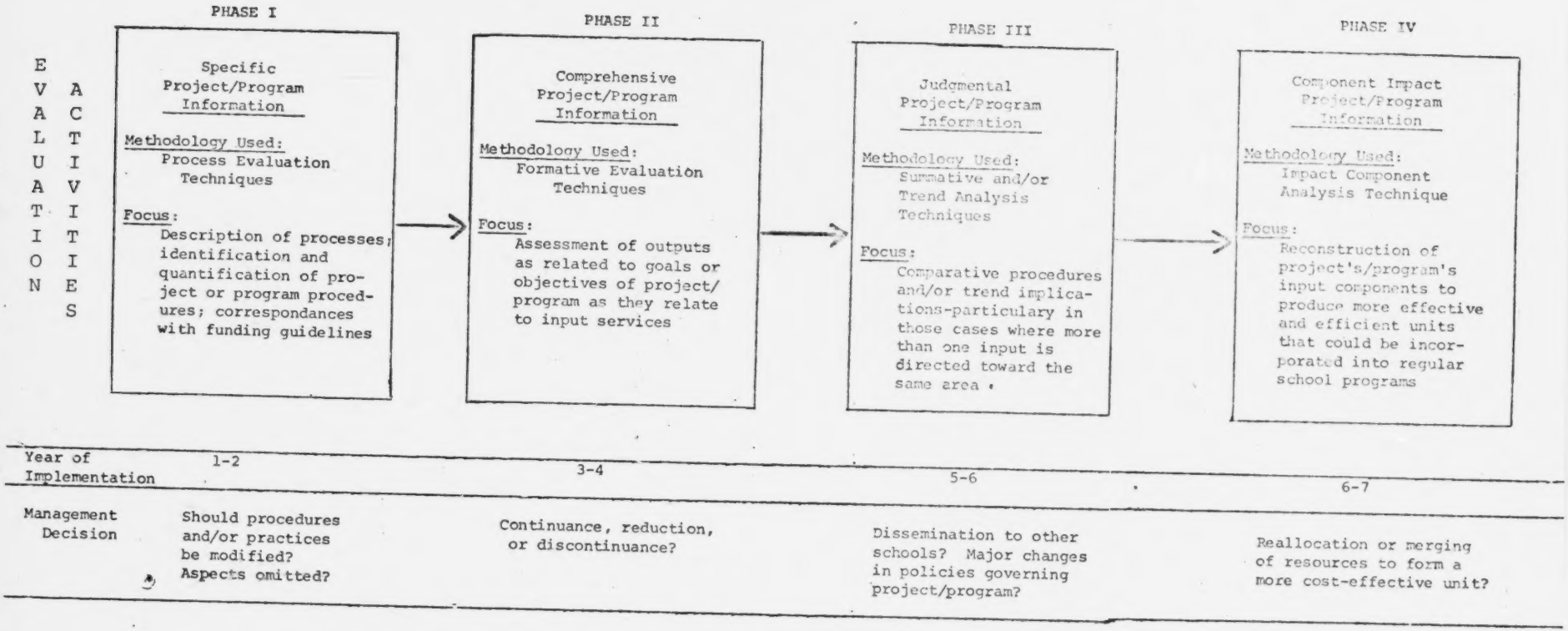
EVALUATION ACTIVITIES
PHASE I
Specific Project/Program Information
Methodology Used:
Process Evaluation Techniques
Focus:
Description of processes; identification and quantification of project or program procedures; correspondances with funding guidelines
PHASE II
Comprehensive Project/Program Information
Methodology Used:
Formative Evaluation Techniques
Focus:
Assessment of outputs as related to goals or objectives of project/program as they relate to input services
PHASE III
Judgmental Project/Program Information
Methodology Used:
Summative and/or Trend Analysis Techniques
Focus:
Comparative procedures and/or trend implications-particulary in those cases where more than one input is directed toward the same area.
PHASE IV
Component Impact Project/Program Information
Methodology Used:
Impact Component Analysis Technique
Focus:
Reconstruction of project's/program's input components to produce more effective and efficient units that could be incorporated into regular school programs
Year of Implementation
1-2
3-4
5-6
6-7
Management Decision
Should procedures and/or practices be modified? Aspects omitted?
Continuance, reduction, or discontinuance?
Dissemination to other schools? Major changes in policies governing project/program?
Reallocation or merging of resources to form a more cost-effective unit?

Figure 1. Correspondences between the changes and levels of management decisions, year of project/program implementation, and requisite evaluation activities.

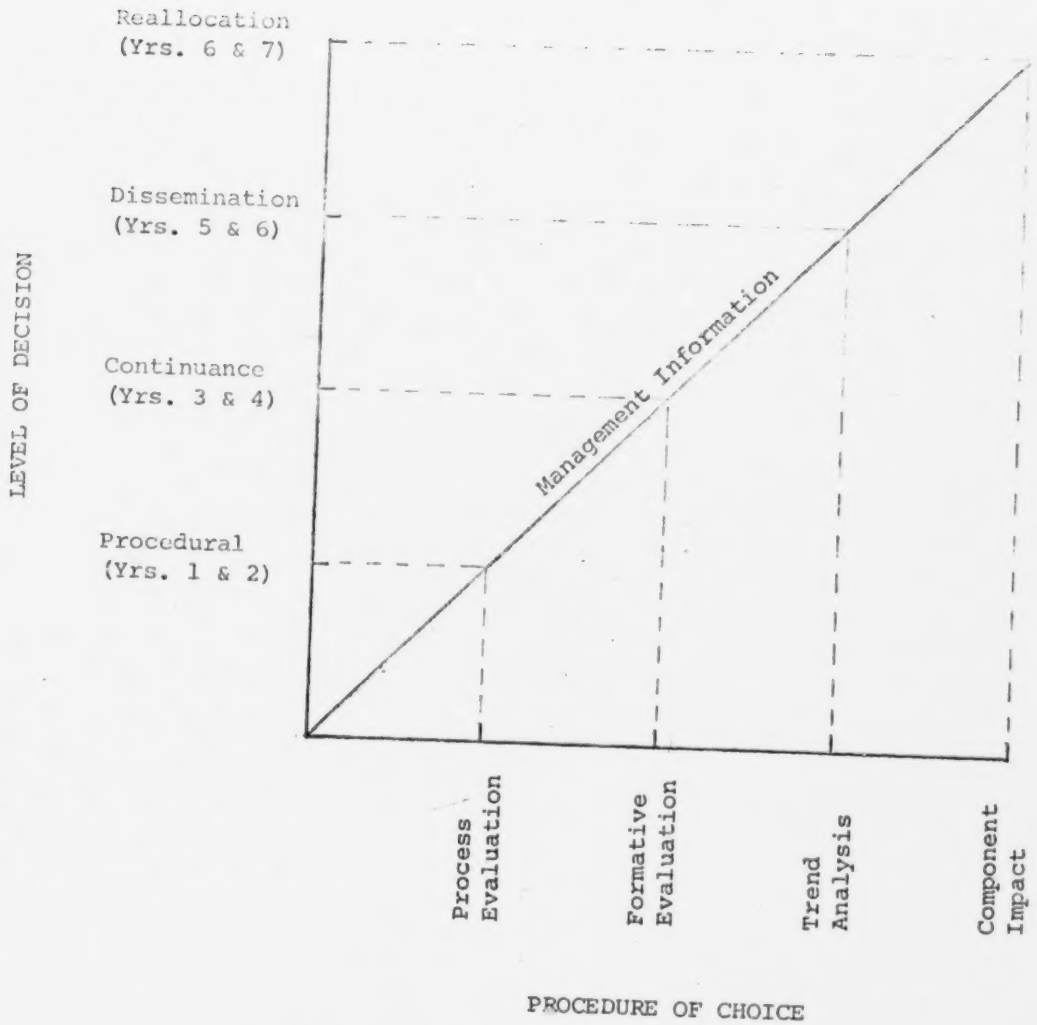

Figure 2. Relationship between levels of school management decisions and R & E procedures for producing relevant management information.